T.

IJ

Sequence listings:

SEQUENCE LISTING

Applicant: Garvan Institute of Medical Research

Title of Invention: A potential effector for the Grb7 family of signalling proteins.

Current Application Number: Current Filing Date:

Prior Application Number: PO9388
Prior Application Filing Date: 1997-09-23

Number of ID SEQ Nos: 2

Software: PatentIn Ver. 2.0

SEQ ID NO: 1 Length: 3400 Type: DNA

Organism: Homo sapiens

Sequence: 1 attectette ataatgeatg etettttg/gt catgetgaag tagteaatet eettttgega 60 catggtgcag accccaatgc tcgagataat tggaattata ctcctctcca tgaagctgca 120 attaaaggaa agattgatgt ttgcat#gtg ctgttacagc atggagctga gccaaccatc 180 cgaaatacag atggaaggac agcat / ggat ttagcagatc catctgccaa agcagtgctt 240 actggtgaat ataagaaaga tgaagtctta gaaagtgcca ggagtggcaa tgaagaaaaa 300 atgatggete tacteacace attadatgte aactgecacg caagtgatgg cagaaagtea 360 actccattac atttggcagc agg/tataac agagtaaaga ttgtacagct gttactgcaa 420 catggacgtg atgtccatgc tagagataaa ggtgatctgg taccattaca caatgcctgt 480 tcttatggtc attatgaagt a/ctgaactt ttggtcaagc atggtggctg tgtaaatgca 540 atggacttgt ggcaattcac tcctcttcat gaggcagctt ctaagaacag ggttgaagta 600 tgttctcttc tcttaagtta fggtgcagac ccaacactgc tcaattgtaa gaataaaagt 660 gctatagact tggctcccac accacagtta aaagaaagat tagcatatga atttaaaggc 720 cactcgttgc tgcaagctgc acgagaagct gatgttactc gaatcaaaaa acatctctct 780 ctggaaatgg tgaatttcaa gcatcctcaa acacatgaaa cagcattgca ttgtgctgct 840 gcatctccat atcccaaaqg aaagcaaata tgtgaactgt tgctaagaaa aggagcaaac 900 atcaatgaaa agactaaaga attcttgact cctctgcacg tggcatctga gaaagctcat 960 aatgatgttg ttgaagt#gt ggtgaaacat gaagcaaagg ttaatgctct ggataatctt 1020 ggtcagactt ctctacacagag agctgcatat tgtggtcatc tacaaacctg ccgcctactc 1080 ctgagctatg ggtgtgatcc taacattata tecetteagg getttactge tttacagatg 1140 ggaaatgaaa atgtacagca actcctccaa gagggtatct cattaggtaa ttcagaggca 1200 gacagacaat tgctg ϕ aagc tgcaaaggct ggagatgtcg aaactgtaaa aaaactgtgt 1260 actgttcaga gtgtcactg cagagacatt gaagggcgtc agtctacacc acttcatttt 1320 gcagctgggt ataaqagagt gtccgtggtg gaatatctgc tacagcatgg agctgatgtg 1380 catgctaaag ataa#ggagg ccttgtacct ttgcacaatg catgttctta cggacattat 1440 gaagttgcag aact/tettgt taaacatgga geagtagtta atgtagetga tttatggaaa 1500 tttacacctt tacatgaagc agcagcaaaa ggaaaatatg aaatttgcaa acttctgctc 1560 cagcatggtg cagacctac aaaaaaaac agggatggaa atactccttt ggatcttgtt 1620 aaagatggag at/cagatat tcaagatctg cttaggggag atgcagcttt gctagatgct 1680 gccaagaagg gtfgtttagc cagagtgaag aagttgtctt ctcctgataa tgtaaattgc 1740 cgcgataccc aa/ggcagaca ttcaacacct ttacatttag cagctggtta taataattta 1800 gaagttgcag agtatttgtt acaacacgga gctgatgtga atgcccaaga caaaggagga 1860 cttattcctt tacataatgc agcatcttac gggcatgtag atgtagcagc tctactaata 1920



aagtataatg catototoaa tgooacggac aaatgggott toacacottt goacgaagca 19%0gcccaaaagg gacgaacaca gctttgtgct ttgttgctag cccatggage tgacccgact 2040 cttaaaaatc aggaaggaca aacaccttta gatttagttt cagcagatga tgtcagcgct 2100 cttctgacag cagccatgcc cccatctgct ctgccctctt gttacaagcc tcaagtgctc 2160 aatggtgtga gaageeeagg ageeactgea gatgetetet etteaggtee atetaggeea 2220 tcaagcettt etgeageeag eagtettgae aacttatetg ggagttttte agaactgtet 2280 tcagtagtta gttcaagtgg aacagagggt gcttccagtt tggagaanaa ggaggttcca 2340 ggagtagatt ttagcataac tcaattcgta aggaatcttg gacttgagca cctaatggat 2400 atatttgaga gagaacagat cactttggat gtattagttg agatggggca chaggagctg 2460 aaggagattg gaatcaatgc ttatggacat aggcacaaac taattaaagg/agtcgagaga 2520 cttatctccg gacaacaagg tettaaccca tatttaactt tgaacaccts tggtagtgga 2580 acaattetta tagatetgie teetgatgat aaagagttte agtetgtgga ggaagagatg 2640 caaagtacag ttcgagagca cagagatgga ggtcatgcag gtggaat/ctt caacagatac 2700 aatattetea agatteagaa ggtttgtaae aagaaaetat gggaaggata eaeteaeegg 2760 agaaaagaag tttctgaaga aaaccacaac catgccaatg aacgaatgct atttcatggg 2820 totoottttg tgaatgcaat tatooacaaa ggotttgatg aaaggcatgo gtacataggt 2880 ggtatgtttg gagetggeat ttattttget gaaaactett earphiaaaageaa teaatatgta 2940 tatggaattg gaggaggtac tgggtgtcca gttcacaaag acagatettg ttacatttgc 3000 cacaggcage tgetettttg eegggtaace ttgggaaagt ettteetgea gttcagtgca 3060 atgaaaatgg cacattetee tecaggteat cacteagtea etggtaggee cagtgtaaat 3120 ggeetageat tagetgaata tgttatttae agaggagaac aggettatee tgagtattta 3180 attacttacc agattatgag gcctgaaggt atggtcgatg gataaatagt tattttaaga 3240 aactaattcc actgaaccta aaatcatcaa agcaggagtg gcctctacgt tttactcctt 3300 tgctgaaaaa aaatcatctt gcccacaggc ctgtggcaaa aggataaaaa tgtgaacgaa 3360 gtttaacatt ctgacttgat aaagctttaa taa#gtacag SEQ ID NO: 2 Length: 1074 Type: PRT Organism: Homo sapiens Sequence: 2 Ile Pro Leu His Asn Ala Cys ≸er Phe Gly His Ala Glu Val Val Asn Leu Leu Leu Arg His Gly A/a Asp Pro Asn Ala Arg Asp Asn Trp Asn Tyr Thr Pro Leu His G∱u Ala Ala Ile Lys Gly Lys Ile ∧sp Val Cys Ile Val Leu Leu Gly His Gly Ala Glu Pro Thr Ile Arg Asn Thr Asp Gly Arg Thr Ala/Leu Asp Leu Ala Asp Pro Ser Ala Lys Ala Val Leu Thr Gly Glu Tyr Lys Lys Asp Glu Leu Leu Glu Ser Ala Arg Ser Gly Asn Glu G/u Lys Met Met Ala Leu Leu Thr Fro Leu Asn Val Asn Cys His Ala Ser Asp Gly Arg Lys Ser Thr Pro Leu His Leu Ala Ala Gly

Tyr/Asn Arg Val Lys Ile Val Gln Leu Leu Gln His Gly Arg Asp

VÁl His Ala Lys Asp Lys Gly Asp Leu Val Pro Leu His Asn Ala Cys

135

15

145 150 1.55 160 Ser Tyr Gly His Tyr Glu Val Thr Glu Leu Leu Val Lys His Gly Gly Cys Val Asn Ala Met Asp Leu Trp Gln Phe Thr Pro Leu His G/Yu Ala Ala Ser Lys Asn Arg Val Glu Val Cys Ser Leu Leu Leu 5/er Tyr Gly 200 205 Ala Asp Pro Thr Leu Leu Asn Cys Lys Asn Lys Ser Ala Ile Asp Leu 210 Ala Pro Thr Pro Gln Leu Lys Glu Arg Leu Ala/Tyr Glu Phe Lys Gly 230 His Ser Leu Leu Gln Ala Ala Arg Glu Ala Asp Val Thr Arg Ile Lys 250 Lys His Leu Ser Leu Glu Met Val Asn Phe Lys His Pro Gln Thr His Glu Thr Ala Leu His Cys Ala Ala Ala Ser Pro Tyr Pro Lys Arg Lys 280 Gln Ile Cys Glu Leu Leu Leu Arg Lys Gly Ala Asn Ile Asn Glu Lys 295 Thr Lys Glu Phe Leu Thr Pr√ Leu His Val Ala Ser Glu Lys Ala His 310 Asn Asp Val Val Glu Val ∜al Val Lys His Glu Ala Lys Val Asn Ala 325 Leu Asp Asn Leu Gly G/n Thr Ser Leu His Arg Ala Ala Tyr Cys Gly 340 345 His Leu Gln Thr Cys Arg Leu Leu Leu Ser Tyr Gly Cys Asp Pro Asn Ile Ile Ser Leu Øln Gly Phe Thr Ala Leu Gln Met Gly Asn Glu Asn 375 Val Gln Gln Lef Leu Gln Glu Gly Ile Ser Leu Gly Asn Ser Glu Ala 390 Asp Arg Gln Leu Leu Glu Ala Ala Lys Ala Gly Asp Val Glu Thr Val Lys Lys Leµ Cys Thr Val Gln Ser Val Asn Cys Arg Asp Ile Glu Gly Arg Gln Ser Thr Pro Leu His Phe Ala Ala Gly Tyr Asn Arg Val Ser 440 Glu Tyr Leu Leu Gln His Gly Ala Asp Val His Ala Lys Asp Lys 📢 gly Leu Val Pro Leu His Asn Ala Cys Ser Tyr Gly His Tyr

-

465 470 475 48Q Glu Val Ala Glu Leu Leu Val Lys His Gly Ala Val Val Asn Val 485 490 Asp Leu Trp Lys Phe Thr Pro Leu His Glu Ala Ala Ala Lys 505 Tyr Glu Ile Cys Lys Leu Leu Leu Gln His Gly Ala Asp Æro Thr Lys 520 Lys Asn Arg Asp Gly Asn Thr Pro Leu Asp Leu Val Lys Asp Gly Asp 535 Thr Asp Ile Gln Asp Leu Leu Arg Gly Asp Ala Ala Leu Leu Asp Ala 550 Ala Lys Lys Gly Cys Leu Ala Arg Val Lys Lys Leu Ser Ser Pro Asp 565 570 Asn Val Asn Cys Arg Asp Thr Gln Gly Arg His Ser Thr Pro Leu His 585 Leu Ala Ala Gly Tyr Asn Asn Leu Gly Val Ala Glu Tyr Leu Leu Gln 600 His Gly Ala Asp Val Asn Ala Gln/Asp Lys Gly Gly Leu Ile Pro Leu 615 His Asn Ala Ala Ser Tyr Gly Mis Val Asp Val Ala Ala Leu Leu Ile 630 Lys Tyr Asn Ala Ser Leu Agn Ala Thr Asp Lys Trp Ala Phe Thr Pro 645 Leu His Glu Ala Ala Gln Lys Gly Arg Thr Gln Leu Cys Ala Leu Leu 660 665 Leu Ala His Gly Ala Asp Pro Thr Leu Lys Asn Gln Glu Gly Gln Thr 680 Pro Leu Asp Leu Val Ser Ala Asp Asp Val Ser Ala Leu Leu Thr Ala 695 Ala Met Pro Pro Ser Ala Leu Pro Ser Cys Tyr Lys Pro Gln Val Leu 705 710 Asn Gly Val Arg Ser Pro Gly Ala Thr Ala Asp Ala Leu Ser Ser Gly 730 Pro Ser Sør Pro Ser Ser Leu Ser Ala Ala Ser Ser Leu Asp Asn Leu Ser Gly/Ser Phe Ser Glu Leu Ser Ser Val Val Ser Ser Ser Gly Thr Glu Gly Ala Ser Ser Leu Glu Lys Lys Glu Val Pro Gly Val Asp Phe Ile Thr Gln Phe Val Arg Asn Leu Gly Leu Glu His Leu Met Asp

(h)

Asp Gly

785 790 795 800 Ile Phe Glu Arg Glu Gln Ile Thr Leu Asp Val Leu Val Glu Met G His Lys Glu Leu Lys Glu Ile Gly Ile Asn Ala Tyr Gly His Xrg His 825 Lys Leu Ile Lys Gly Val Glu Arg Leu Ile Ser Gly Gln 💋n Gly Leu Asn Pro Tyr Leu Thr Leu Asn Thr Ser Gly Ser Gly Thr Ile Leu Ile 860 Asp Leu Ser Pro Asp Asp Lys Glu Phe Gln Ser Yal Glu Glu Met 870 Gln Ser Thr Val Arg Glu His Arg Asp Gly 🗹 His Ala Gly Gly Ile Phe Asn Arg Tyr Asn Ile Leu Lys Ile G/n Lys Val Cys Asn Lys Lys 905 Leu Trp Glu Arg Tyr Thr His Arg Arg Lys Glu Val Ser Glu Glu Asn 920 His Asn His Ala Asn Glu Arg Mex Leu Phe His Gly Ser Pro Phe Val Asn Ala Ile Ile His Lys Gly/Phe Asp Glu Arg His Ala Tyr Ile Gly 950 Gly Met Phe Gly Ala Gly Ale Tyr Phe Ala Glu Asn Ser Ser Lys Ser 965 Asn Gln Tyr Val Tyr G/Ay Ile Gly Gly Gly Thr Gly Cys Pro Val His Lys Asp Arg Ser Cys Tyr Ile Cys His Arg Gln Leu Leu Phe Cys Arg 995 1000 Val Thr Leu Gly/Lys Ser Phe Leu Gln Phe Ser Ala Met Lys Met Ala 1010 1015 His Ser Pro Pro Gly His His Ser Val Thr Gly Arg Pro Ser Val Asn 1025 1030 Gly Leu Ala Glu Tyr Val Ile Tyr Arg Gly Glu Gln Ala Tyr 1050 Pro Glu/Tyr Leu Ile Thr Tyr Gln Ile Met Arg Pro Glu Gly Met Val 1060 1065